ISSN 1392-0340 (Print)
ISSN 2029-0551 (Online)
https://doi.org/10.15823/p.2020.139.11

Pedagogika / Pedagogy
2020, t. 139, Nr. 3, p. 219–238 / Vol. 139, No. 3, pp. 219–238, 2020

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Indonesian Undergraduate Students' Perspectives of Sustainable Economic Education: A Survey Study

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Abstract. This study was designed to uncover perceptions of 230 undergraduate students at a public university in Indonesia, concerning sustainable economic education issues in higher education settings. The results of this study suggested that the respondents held positive beliefs on the issue of sustainable economic education issues. Despite this, they voiced multifaceted perspectives on the refinement of economic teaching practices. This paper ends with suggestions for the stakeholders to improve the quality of classroom teachings which corresponds to the age of industry 4.0.

Keywords: *undergraduate students' perspective, sustainable economic education, environmental economic education, industry 4.0 era, information and technology revolution.*

Introduction

The development of economic activities forced the industrial sector into the industrial 4.0 era. This era transforms various processes of production, distribution, and consumption. Industry 4.0 era also challenges manufacturing sectors to facing the short and sophisticated technology and innovation cycles, in particular, product needs with large scale production costs and intense competition (Caballero, Fernández, & Park, 2019; Zhu, Hao, Lu, Wu, & Ran, 2019). Presumably, the trend of economic growth also

continues to increase with the most substantial contribution from the manufacturing sector. Based on the Indonesian Statistics Board, Indonesia's GDP generated from this sector amounted to 2,739.4 trillion in 2017, an increase from 385.5 trillion in 2000 (Yuana, Sengers, Boon, & Raven, 2019).

Rapid growth in the industrial sector is also the impact of increased household income and increasingly diverse patterns and types of public consumption. These conditions lead to an increase in volume, variety of classes, and characteristics of rubbish and waste (Marques, Fuinhas, & Tomás, 2019). According to the Ministry of Environment and Forestry and the Ministry of Industry in 2016, the amount of rubbish heap in Indonesia has reached 65.2 million tons per year. While from B3 waste, the rest of the industry managed in 2017 that amounted to 60.31 million tons and accumulated from 2015 only reached less than 40 percent of the B3 waste management target of 755.6 million tons in 2019. The biggest types of businesses that manage B3 waste are mining, energy, and minerals (Purba et al., 2019).

Recently, the issue of a sustainable economy in the industrial revolution 4.0 is becoming a global concern, including in Indonesia (Mahesa, Yudoko, & Anggoro, 2019; Joseph et al., 2019). The essential tool to achieve economic, social, and ecological goals related to sustainable development is education. In line with the direction of national policies and strategies, the development of education and culture are influenced by the main problems and challenges facing the nation in the next five years as well as strategic environmental conditions. Hence, higher education institutions play a significant role in entering the era of industry 4.0 by considering a sustainable economy.

The fundamental problem that has occurred up to now is that economic education provided conventionally is still low on a sustainable economy or an environmentally friendly economy teaching frameworks. Conceptually, sustainable economy is leading to the formation of productive economic behavior that is concerned with environmental issues. This environmentally-friendly (sustainable) economic behavior can be preceded by the formation of knowledge and attitudes towards the young generation of economic actors, namely through the provision of sustainable economic education at all levels of education. One level of education that plays an important role is in undergraduate education. Therefore, it is necessary to portray the real conditions of the implementation of sustainable economic learning in Indonesia, and how the responses and expectations of undergraduate students about the implementation of sustainable economic education, both those from rural and urban areas, characterize the whole Indonesian society.

Furthermore, the role of higher education is as an innovator in preparing human resources, especially millennial youth, with knowledge of sustainable development in the digital era. However, little attention has been addressed to investigate these young people's perspectives, in this case, the university students, on sustainable economic education practices in higher education contexts. To fill this void, we explored Indonesian

undergraduate students' perspectives on sustainable economic education in a higher education setting.

Literature Review

Education for Sustainable Economic

Theoretically, Güney (2019) has defined sustainable development as "as maintaining the amount of the sources used by society for today's needs at a level that will not deprive future generations of their needs (p. 1)". MacGregor, Walker, and Katz-Gerro (2019) also defined sustainability as the effects on sustainable human resources, social-culture, natural resources, and the environment for fulfilling the present generation and future generation in each economic activity. To fulfill that meaning, the UN has created the 17 SDGs of the 2030 Agenda for Sustainable Development on 1 January 2016. These goals were created by a circumstance in which decisions about what it means to develop and how to realize them equitably within the limits of the natural environment of humanity need to be taken into account (Eustachio, Caldana, Liboni, & Martinelli, 2019). Thus, sustainable development goals are related to living environmental problems (Martínez-Ortega et al., 2019). In socializing these goals, the role of education is necessary, especially in higher education. Therefore, higher education participation in supporting sustainable development can be enacted through sustainable economic education or education for sustainable development.

The innovation of the conventional economic education system needs to be changed towards economic education that is environmentally friendly, or sustainable economic education. It is suspected that conventional economic education has given birth to economic behavior that is less concerned with environmental problems. Economic growth has been considered successful as an indicator of economic development, but at the same time, the quality of the environment has deteriorated over time. Therefore, it is time for economic education in universities to take a role. Reforms in economic education can be done through innovation in the learning process, both in terms of learning methods and learning materials that must adapt to the development of information technology, especially in adapting to digital systems (Wahjoedi, 2015).

Based on the document of the Rio+20, the member of the UN agrees "to promote education for sustainable development and to integrate sustainable development more actively into education" (the United Nation Conference, 2012). In addition, since 1992, on Agenda 21, the UN declared that education plays a main role in any sustainable development aspects for our future. The French National Strategy (2010), entitled "Knowledge Society" acknowledges the commitment of the French government to harmonize education for sustainable development in every field and at each level. Abu-Goukh, Ibraheem,

and Goukh (2013) concluded that education for sustainable economic is intended to make economic actors more responsive to the present and future challenges, and education in economics must be centered on the pursuit of sustainable development.

Furthermore, Burja and Burja (2013) described education for sustainable economic as science, learning, or study of the economic activities of the community with an environmental perspective. The goal of this study is to prepare human resources who have economic perspectives (literacy), attitudes, and behavior from an environmental perspective as well as analyzing the sustainable economic education or environmental perspective can be conducted in input, process, and output approaches (D'Amato, Droste, Winkler, & Toppinen, 2019).

Learning input consists of the learning goals, curriculum, and materials, teachers, and students (Obeng-Odoom, 2019). Meanwhile, the learning process consists of how to lead the goals and learning materials through the roles of methods, media, learning means, and evaluation. In the learning output, the performance of learning outcomes, including perspectives, attitudes, and behavior of students is central. The objects of the sustainable economic education are classified into three objectives, namely formal education at school, informal in the families, and non-formal in the society (Eilks, 2015). Although the learning outcome of economic education consists of perspectives (literacy), attitude, the tendency of student's behavior to prepare human resources of economic actors who have environmental perspectives is present (Eilks, 2015; Read, Mawaskar, & Habib, 2019).

In the context of this industrial era, sustainable economic education must respond to the learning innovation by implementing digital and online learning. Sustainable economic learning uses conventional learning and digital-based learning innovation or online technology (Duvenage et al., 2020). In the sustainable economic learning innovation, online media can be used intensively for supporting the process of searching the literature, learning media sources, and also presenting the learning materials and tasks to the students.

The major materials for sustainable economic education focus on the activities of the economy on production, distribution, and consumption in the community. Those activities entirely correlated to the problems of natural resources and environment, social-culture in the society, and technological development in the community. The important demand for sustainable economic learning is the process of learning to build cognition (literacy), awareness, and behavior of economic actions (Mangla et al., 2020). Furthermore, this economic activity considers the living environment, maintaining the preservation of natural resources, and the quality of human health. In other words, knowledge of green economic must be owned by all economic actors. Merino-Saum, Clement, Wyss, and Baldi (2020) defined a green economy as an effort in improved human well-being and social equity, although significantly reducing environmental risks and ecological scarcities. It can be interpreted a green economy can be thought of as an activity which is resulting in low carbon, efficiency resources, and socially inclusive.

Previous Studies on Sustainable Economic Education

The sustainable economic learning process aims to produce the formation of understanding (literacy), attitudes, and the tendencies of students' behavior towards the economic concept of environmental perspective. The three aspects can be different from each economic actor. There is an individual who has a direct literacy, attitude, and economic behavior of the environmental perspective, while the other does not have a direct one.

Several studies showed that conventional economic learning has many weaknesses and not attractive to students (De Smet, De Wever, Schellens, & Valcke, 2016). Those can come from the teachers, learning materials, learning methods, learning media, and supporting means for learning, thereby reducing the learning interest and passion of students (Tremblay-Wragg, Raby, Ménard, & Plante, 2019). Afterward, teachers tend to be dominant, and the learning materials tend to be less dynamic. Further, the learning methods are boring; the learning media are static and not supported by the internet, and less utilizing the environmental facilities as the support of the academic climate (Wahjoedi, 2015). Therefore, an innovation of economic learning with digital technology is needed.

Another study was carried out by Yuliani, et al. (2019), who showed that the Small and Medium Enterprises (SMEs) or informal sector generally have good environmental cognition (literacy) of the economy. On the other hand, it is not balanced with the real economic and environmentally perspective attitudes. The economic perspective in the business is good, but its attitude and business behavior are not good. They are still doing productive business, which tends to cause environmental damage and pollution. It seems that the level and type of education do not distinguish between real attitudes and behaviors in their business activities. They are adults and older in their ages who have attitudes and behaviors that are less concerned with environmental problems.

Furthermore, Eilks (2015) contended that economical for sustainable development can provide three dimensions of science education, namely individual, societal, and vocational relevance. In other words, sustainable economic education as the focus of a new educational paradigm containing innovative structures can promote educational reform beyond mere curriculum revision and domain-specific pedagogical innovation (Garner, et al., 2014). However, enforcement of ESD on teaching and learning approaches is rare. In higher education, economic teaching or learning tends to limit the focus of issues related to sustainability to the background of certain subject matter content.

On the educator side, Westwell and Ingle (2019) explain that they had to struggle for decades with questions about how to design and evaluate curricula through which scientific knowledge did not end in isolated artificial environments but left a mark in the daily lives of students. Kahn and Misiaszek (2019) also described that the design of education and evaluation of environmental programs must be in line with the cultural-historical aspects of human activities. Therefore, the impact of such programs must be measured as

timeless and sustainable change in the community brought about by students as humans for future sustainability and reach out to their home environment.

Given the aforementioned studies in the literature, discussion on undergraduate students' perspectives of sustainable economic education in the higher education context seems sparse. Students as stakeholders are central to respond to the teaching and learning activity in the economic classes as their perspectives inform pedagogical decisions for the lecturers. Thus, the present study attempts to reveal such a notion.

Method

Design

This study was carried out through a survey design (Creswell, 2014) under the framework of the quantitative method. This approach was intended to obtain data on a description of a single variable, namely the students' voices about sustainable economic development and their future ideas about learning sustainable economic education in tertiary institutions. Data description of students' perceptions of sustainable economic activities are based on students' insights about sustainable economics on the basis of aspects of knowledge (cognition), attitude (attitude), and behavioral tendencies (action tendency) about sustainable economic activities or sustainable development. Besides, data on future student wishes or desires about continuing economic education in tertiary institutions determine the students' insights into sustainable economic activities).

Respondents

Respondents involved in this study were 230 undergraduate students consisting of 140 male and 90 female students majoring in economic education in a public university in Indonesia. They were first introduced to the goal of this study, including its benefits and were also invited to sign a consent form. They were recruited using a purposive sampling technique. At the time of this study, they were attending a course on economic and sustainable development taught by the first author of this study. Thus, our survey was aligned with what they were studying. As a result, it generated insights about perspectives of sustainable economic from the respondents.

Data Collection

Data were collected by distributing questionnaires to the students. The questionnaire included several sections such as a) student's identity, b) students' insights and attitudes about sustainable economic activities, c) the tendency of student behavior towards an economic environment, (d) student perceptions of learning sustainable economics, and e) expectations and suggestions for future students about learning the sustainable

economics in higher education. The student identity includes the origin of education and the area of origin of the student. The students' insights about sustainable economy include: aspects of cognition, attitude, and behavioral tendencies about sustainable economics. Economic behavior includes aspects of production, distribution, and consumption behaviors. Furthermore, the students' perceptions and expectations about sustainable economic learning include aspects of introduction, course status, material in the curriculum, learning media, and preparation of lecturers supporting sustainable economics courses (Mendoza, Gallego-Schmid, & Azapagic, 2019).

Data Analysis

The data were then analysed by using descriptive statistical analysis in the form of a percentage (Wang et al., 2019). From this analysis, the level of insights, attitudes, and behavioral tendencies of students about sustainable economic activities as well as trends in future expectations and student suggestions about learning sustainable economics in college are visible. The descriptive data informs general information of the students' insights and attitudes towards the latest phenomenon of sustainable economics.

Findings

Knowledge and Behavior of Sustainable Economic

In contrast to groups of young people or adolescents who belong to the millennial generation group, between perspectives (literacy), their attitudes and behavior tend to go in the same direction. Several survey results showed that most consumption from the new generation (generation of millennials) is willing to pay more for sustainable goods and services. Those products are produced by companies that have a sense of responsibility and ethics. They hope the company will protect the environment, maintain exploitation actions, and treat business partners and workers fairly. For consumer demand, resource-saving measures (costs) are one of the key reasons why business people and consumers must adopt sustainability programs.

From 230 respondents, it was observed that 94.8% of the surveyed respondents understand the term Sustainable Economics, and 57.8% of them know the term when attending their lectures. Approximately, 42.2% of them also understand sustainable economics with a deep meaning that covers a green economy. Meanwhile, with the same scale, the respondents only knew literally sustainable economics without a vast understanding. Furthermore, 68.7% of them think that what describes sustainable economics is environmental sustainability. Then, followed by universal education by 27% voices, 1.7% is a misguidance of mothers and children and 2.6% HIV/AIDS prevention.

Table 1
Insights on Sustainable Economics

No	Questions	Percentage of Answers
1	Are you familiar with the term "Sustainable Economics"?	1. Yes (94.8%) 2. No (5.2%)
2	If yes, where did you first know the term?	1. High school (13%) 2. University (57.8%) 3. Internet (21.3%) 4. Others (7.8%)
3	The true meaning of Sustainable Economics is the same as …	1. Economic Sustainable (42.2) 2. Sustainable development (12.6) 3. Green Economic (3) 4. All concepts are acceptable (42.2)
4	There are 17 Millennium Development Goals (MDGs) results of the Millennium Summit which took place at the UN headquarters in New York, September 2000. One that best describes the message of sustainable development is …	1. Universal education (27%) 2. Health of both mother and child (1.7%) 3. HIV/AIDS prevention (2.6%) 4. Environmental Sustainability (68.7%)
5	The following actions illustrate the behavior of sustainable economics in entering the industrial era 4.0:	1. Exploiting natural resources and the environment for the economy (7.4%) 2. Coal mining activities in an area to increase locally-generated revenue (0.9%) 3. Exploiting gold resources to increase national income (1.7%) 4. Applying IT for environmentally friendly economic activities (90%)
6	Sustainable production activities in general must be directed at principles of …	1. Maximizing profit and minimize cost (30.9%) 2. Exploiting large-scale of production resources for the economy (3.5%) 3. Conducting fairly production activities on a continuous basis (33.5%) 4. Maximizing profits by paying attention to external costs (32.2%)
7	The principle of distribution of goods and services must be directed at …	1. Fair distribution of goods and services for all (20.4%) 2. Healthy distribution of goods and services (8.7%) 3. Distribution of goods and services by minimizing pollution (28.7%) 4. Efficient distribution of goods and services and reduce waste (42.2%)

No	Questions	Percentage of Answers
8	Sustainable consumption activities must meet the principle of …	1. Healthy consumerization by using environmentally friendly materials (95.7%) 2. Modern consumerization of goods and services (1.3%) 3. High-quality consumerization of materials and expensive (0%) 4. Consumerization of affordable goods and services (3%)
9	The role of education in higher education according to the target millennium development goals in order to improve the quality of Indonesian people in the future is …	1. As the organizer of the learning process (7.8%) 2. As a facilitator of HR improvement training activities (23.5%) 3. Changing teaching university to present server and research agency & innovation partners (53.9%) 4. Preparing survivability of human life on earth (14.8%)
10	The cause of global warming is CO_2 into the air occurs from industrial activity. The right solution is the application of eco-technology. The main principle is …	1. Balancing between human needs and natural needs (28.7%) 2. Overcoming pollution through the shell game technology (13.5%) 3. A systemic approach to energy conservation (4.8%) 4. Technology for solving environmental problems (5.3%)

Based on the respondents' responses, the action that illustrates the behavior of sustainable economics in the industrial era 4.0 is the application of IT for economic activities with environmental insight by 90%. Meanwhile, the general direction of production activities from the respondents' views was almost flat on all answers. Slightly superior is the answer to production activities that must be fair continuously, followed by activities to maximize profits and minimize costs.

Furthermore, 95.7% of the respondents contended that sustainable consumption activities must meet the principle of consuming healthily using environmentally friendly materials. Meanwhile, the remaining 4.3% stated that sustainable consuming activities are consuming goods and services that are modern, affordable by budget, and with expensive quality materials. From the respondents' point of view, it is known that there is a need to change teaching universities to knowledge servers and research and innovation service partners in enhancing the role of education in higher education to improve the quality of Indonesian people in the future. As for the expectations of respondents related to industrial activities that result in global warming is the creation of technology for solving environmental problems.

Table 2
Behaviors of the Respondents

No	Questions	Percentage of Answers
1	Our behavior in dealing with changes in the era of disruption is …	1. We don't have to panic (1.3%) 2. We can still maintain existing conventional conditions (7%) 3. We are required to be able to adapt to environmental changes (86.5%) 4. We must enjoy the conveniences of digitization (5.2%)
2	The following behavior is more representative of sustainable economic behavior …	1. Disposing of trash in the space provided (2.2%) 2. Choosing products that are economical and environmentally friendly packaging (96.1%) 3. Choosing products that have packaging even from plastic (0.4%) 4. Choosing products with expensive packaging according to the product value (1.3%)
3	Producing the right goods and services should …	1. Use raw materials from within the country (7.8%) 2. Use raw materials from abroad (0%), Use resources sparingly (36.1%) 3. Take into account the negative costs and external (56.1%)
4	In the act of distributing the product, it is necessary to pay attention to the packaging of the product. Therefore, we should …	1. Choose products that save on the value of packaging (2.2%) 2. Choose products that are economical and environmentally friendly packaging (96.1%) 3. Choose products that have packaging even from plastic (0.4%) 4. Choose products with expensive packaging according to the product value (1.3%)
5	I try to act to consume goods and services in a way of …	1. Consuming products that are manufactured by environmentally friendly companies (70.9%) 2. Consuming products whose prices are more expensive (1.3%) 3. Consuming products that are more selective (17.4%) 4. Consuming products and services produced in the country (10.4%)

The behavior required in the disruption era is to adapt to changes in the environment. 97% or 223 respondents stated that the subject of environmental economics was needed. The need for this special course demonstrates the importance of understanding sustainable economics in economic activities. Judging from the behavior, the community was 96.1%, who showed awareness of the economic environment.

The Urgency of Education for Sustainable Development

In this research, in exploring the urgency of education for sustainable development, the respondents could choose more than one answer. This is a way to present the expectation of respondents about education for sustainable development.

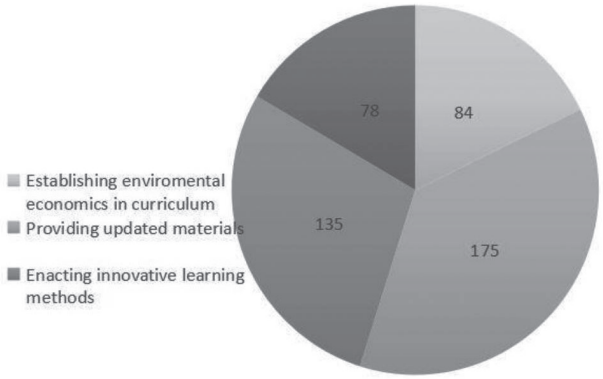

Figure 1. Expecting the Importance of Future Development of Environmental Economics

Based on Chart 1, 76.1% of the respondents affirmed that lecturers should have "preparation of up-to-date environmental economics material to adjust the latest developments," and 59.6% of them believed that "preparation of innovative learning methods and media" is central to be carried out by lecturers. From their expectations, we know that millennials in all economic subjects highly need environmental-economic knowledge. However, demands for delivering material with up-to-date innovations and media are also inevitable. Thus, the combination of environmental-economic and innovation teaching methods can increase awareness of millennial youth about the impact of economic activities on the environment and create a social-entrepreneurial inhabitant.

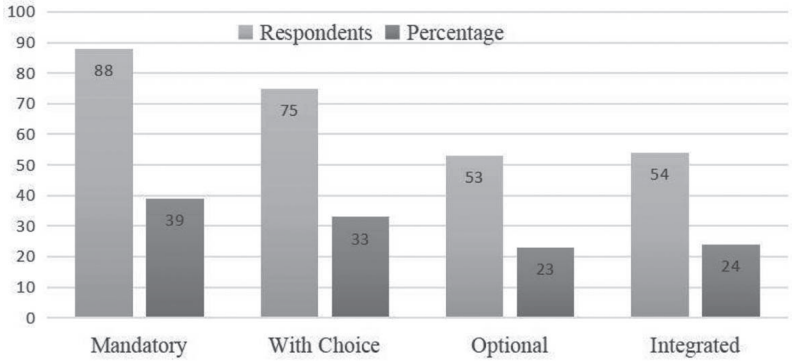

Figure 2. Establishing Environmental Economics in Curriculum

The aim of the next question is to know how urgent of creating an environmental, economic course. Based on Chart 2, 38.3% of the respondents opted that "the status of environmental economic must be stand-alone and mandatory subject." 32.6% of them choose "the status of environmental economic must be stand-alone and choose the subject". Based on this survey, we can understand that the level of awareness of respondents on the importance of environmental economics is quite high. Thus, the urgency of creating

environmental-economic subjects in supporting education for sustainable development is quite urgent.

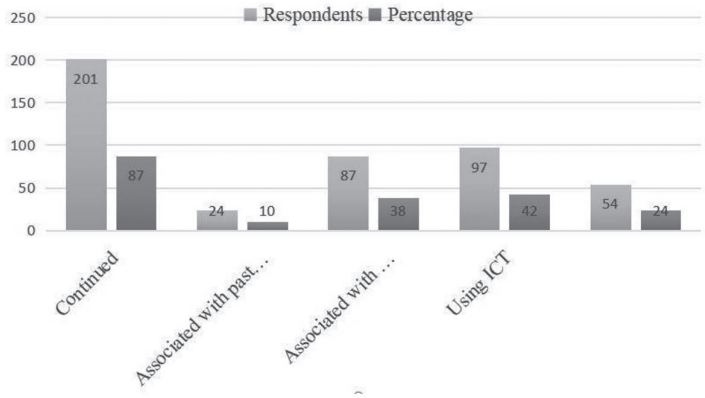

Figure 3. Providing Updated Teaching Materials

The demand for material updates in the study of environmental economics is very high. The renewal material is due to issues related to the impact of economic activities on the environment continue to develop. Showed by Chart 3, 87.4% of the respondents yielded that for the material of environmental economics are developing because of "continue to be up-to-date following the development of the phenomenon that occurs."

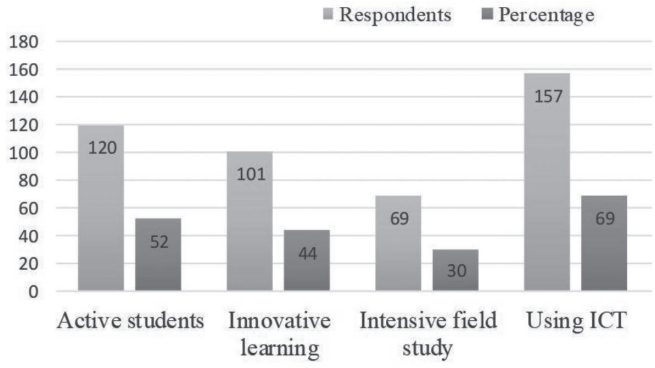

Figure 4. Enacting Innovative Learning Methods

In accomplishing the aim of up-to-date environmental education learning, the role of ICT is crucial. Supported by Chart 4, 68.3% answered that the environmental economics learning method is dynamic, by arguing that "learning media must utilize ICT and follow the evolving phenomenon," and 43.9% of the respondents opted for "the learning process must be innovative by utilizing ICT". In spite of this, 52.2% of them thought the dynamic of the learning method caused "students must be active and creative in the

learning process". Accordingly, it affirms that ICT plays a more important role rather than student activity and creativity to reach all the current issues. Therefore, environmental economics is a dynamic subject to be taught in higher education.

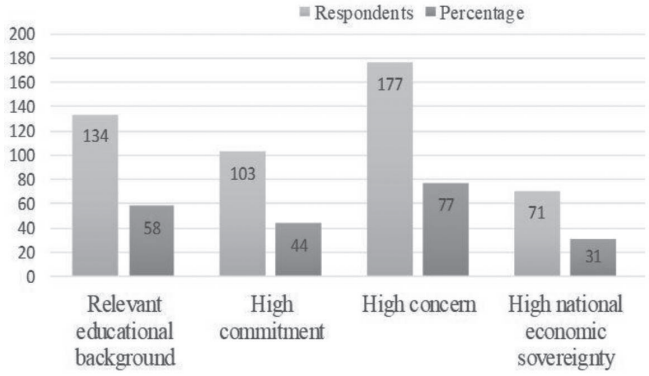

Figure 5. Recruiting Qualified Lecturers

Another critical point of creating an environmental economics subject is the background of the lecturers, who teach this subject. Based on Chart 5, 177 or 77% of the respondents voiced that lecturers must be qualified with "have a high concern for environmental economics problems". Furthermore, they also contended that lecturers must be qualified with "relevant scientific background". This survey concluded that lecturers must have scientific knowledge and serious concern about environmental economic problems for teaching environmental economics.

Discussion

Insight into Sustainability

The results showed that, in general, the respondents already had good insights and perceptions, as well as a positive attitude towards the current demands regarding the concept of a sustainable economy (Misiaszek, 2019). However, the level of real behavioral tendencies is still low. Although in percentage, the level of their introduction to the concept of the sustainable economy tends to be high and the attitude towards a sustainable economy is very positive (Lewis, 2011), the tendency for sustainable economic behavior still tends to be low and still needs to be realized (Wang, Xiang, Yang, & Ma, 2019).

The results of this research are still relatively limited inasmuch the problem of sustainability in the actual practice of economic behavior is still a matter that is still marginalized even though it will become mainstream (Vaez, Sabouhi, & Jabalameli, 2019). Sustainability will be the main demand, current, and for the future, in accordance with

the demands of "Millennial Development Goals" (MDGs), as well as the strong demands in the "Industry 4.0" era (Lemay, Doleck, & Bazelais, 2017). The same research results also occurred in the business community context in Indonesia, especially small and medium businesses, which also showed that insights and attitudes towards sustainable economic activities were good and positive. However, at the level of the action, their real behavior is still low (Yuliani, Wahjoedi, Eko, & Sunaryanto, 2019).

Our findings differ from the results of several surveys of young people in several other regions worldwide, contending that in the consumer generation, especially millennials in general, their insights, awareness, and real behavior are very much colored by the view of sustainability. The result of some surveys shows that new generations of consumers, particularly millennials, are willing to pay more for products and services seen as sustainable or coming from companies that are responsible and ethical (Vaez, Sabouhi, & Jabalameli, 2019). They expect companies to protect the environment, prevent exploitation, and treat business partners and employees fairly (Chang, Chiang, Liu, & Xie, 2019). Beyond consumer demand, cost saving is one of the key reasons why businesses are adopting sustainability programs (Yuan, Han, Wang, Liang, & Li, 2019; Park, Kim, & Ryu, 2019).

The results of this study are expected to be a reason to raise the spirit of awareness and step in efforts to instill insight, attitudes, and economic behavior tendencies environmentally friendly in higher education context (Ye & Post, 2019; Stacher Hörndli et al., 2019). Therefore, the role of sustainable economic education (sustainable economic education) is very strategic to realize real economic behavior based on environmental awareness (Bassi, Gori, & Iseppi, 2019; Teng & He, 2020).

Expectations about the Role of Continuing Economic Education

Conventional economic education in general studies economic behavior by applying the principles that are still conventional, namely "minimize profit maximization or utility cost". Meanwhile, sustainable economic education has changed the philosophy towards environmentally oriented or sustainable mainstream (Higgins-Desbiolles, Moskwa, & Wijesinghe, 2019). All actions of economic actors, both in production, consumption, and distribution must be based on an insight into environmental protection. Business activities must be willing to pay attention to exploitation issues, treat business partners and workers fairly (Peters, Kallmuenzer, & Buhalis, 2019).

The object of study in sustainable economic education will be more directed at the step towards realizing a sustainable agenda (Filho et al., 2018). The ongoing messages that have so far been strongly applied to agricultural, energy, and tourism economic activities are strong and old as the mainstream, but as high as they can be, sustainability must be seen in everything, from finance and consumer goods to education and transportation.

Sustainable economic education is expected to change the outlook in society, especially the millennial youth, as economic agents who have only accommodated views that

prioritize benefits and more consumers who base their buying choices on sustainable practices on the basis of brands and products. Many companies are committing possible projects - being reliable and profitable agents (Bento & Tontini, 2019; Fjesme, 2019).

The views and expectations of students on sustainable economic education with all forms of learning are pivotal to be practiced in a higher education context. With sustainable economic education, it is hoped that it will be able to change the views and behavior of conventional economics towards an environmentally-oriented young generation, especially the students. Another important meaning is also in the context of preparing the millennial generation to enter the industry 4.0 era as intended in the MDGs world program goals (Gunnlaugsson & Einarsdóttir, 2018).

The learning process of sustainable economic education in Indonesia is still running intensively and consistently. This is evident from the learning outcomes achieved by students, namely the achievement of sustainable economic education insight is good, but not followed consistently with real behavior. Therefore, real and optimal action is needed to improve the quality of learning in sustainable economic education, which can be supported by the learning process in tertiary institutions and government policy support in general. The young generations, including society who are still studying on formal educational institutions (schooling) and non-formal education in the community (who are in the process of experiencing informal education in the family or home education), have voices for pedagogical decisions in higher education settings. All of them must have cognition, attitudes, and economic behavior from an environmental perspective.

Our study is open to some limitations. For instance, we collected data from 250 respondents, in which it is encouraged for the future research agenda to recruit more respondents in order to obtain more comprehensive information. Also, this study was carried out in one public university, making it less complex compared to many universities with different characteristics. Despite these, our respondents came from various rural and urban areas throughout Indonesia. The essence of the research findings is that students' insights (knowledge and attitudes) about environmentally-oriented economics as objects of sustainable economic education are relatively good, but in terms of actual behavior, they do not appear to be consistent with their insights. Therefore, as a response and suggestion from students that the learning process in continuing eco-economic education needs to be further strengthened.

Conclusions

This study has attempted to reveal that the implementation of sustainable economic education is the manifestation of human resources that are environmentally perspective as economic actors. With the development of perspective, attitudes, and economic behavior of environmental perspective in the community, it will ultimately support the

realization of national and global sustainable development goals. Readiness and overall community support are necessary for the application of sustainable economic education. The results recommend that the economics sustainability curriculum be enacted in higher education contexts as well as educational stakeholders in higher education work collaboratively with social entrepreneurs in order that lecturers and students obtain sufficient knowledge of the sustainable economy. Therefore, the success of the implementation of sustainable economic education, government commitment, and support from education policies are necessary.

Acknowledgments

We wish to thank the anonymous reviewers in this journal for their critical feedback on our paper. Our sincere thanks also go to *Pusat Publikasi Akademik Universitas Negeri Malang* for the guidance in writing this paper.

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Indonezijos bakalauro studijų paskutinio kurso studentų darnaus ekonominio švietimo perspektyvos: apklausos tyrimo rezultatai

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Santrauka

Šiame straipsnyje aptariamos Indonezijos bakalauro studijų paskutinio kurso studentų darnaus ekonominio švietimo perspektyvos. Studentų buvo paprašyta atsakyti į klausimus ir pateikti savo įžvalgas apie darnią ekonomiką. Rezultatai parodė, kad apskritai respondentai jau pasižymi geromis įžvalgomis ir suvokimu, taip pat yra išvystę teigiamas nuostatas apie darnios ekonomikos koncepciją. Vis dėlto realių elgesio tendencijų lygis žemas. Nors studentų susipažinimo su darnios ekonomikos sąvoka lygis procentais yra tendencingai aukštas ir jų nuostatos į darnią ekonomiką yra labai pozityvios, tai neatsispindi jų elgsenoje. Studentų nuostatos ir lūkesčiai apie darnų ekonominį švietimą visose mokymosi formose yra esminiai dalykai, kuriuos reikia praktikuoti aukštojo mokslo kontekste. Tikimasi, kad su darnios ekonomikos švietimu bus galima pakeisti jaunosios kartos, ypač studentų, nuostatas ir elgseną nukreipiant nuo tradicinės ekonomikos į ekologinę ekonomiką. Kitas svarbus įprasminimas taip pat yra susijęs su tūkstantmečio kartos pasiruošimu įžengti į pramonės 4.0 erą, kaip numatyta Jungtinių Tautų Tūkstantmečio vystymosi tikslų programoje.

Esminiai žodžiai: *paskutinio kurso bakalauro studentų perspektyva, aplinkosauginis mokymasis, pramonė 4.0, informacinių technologijų revoliucija.*

Gauta 2020 01 27 / Received 27 01 2020
Priimta 2020 09 09 / Accepted 09 09 2020